

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-09-07 11:03:47  
Date of Next Testing: 2024-08-27 11:03:47  
Product Name: **Methanol-12C,d4**  
CAS Number: 811-98-3  
Specifications & Purity: D,99.8% (0.05% v/v TMS)  
Lot #: H2224214  
SKU #: **M102264**  
**Analysis: 120810**  
Storage Temperature: Protected from light,Room temperature,Argon charged,Desiccated

| Parameter             | Limit Values     | Result           |
|-----------------------|------------------|------------------|
| Water by Karl Fischer | 0-0.025 (%)      | 0.02 %           |
| Purity(GC)            | 99-100 (%)       | 99.80 %          |
| Proton NMR (Atom % D) | 99.8-100 (atom%) | 99.88 atom%      |
| Mass Balance(V/V TMS) | 0.046-0.06 (%)   | 0.05 %           |
| Appearance (M102264)  | Colorless liquid | Colorless liquid |



John Su  
QA & QC Manager